Amendment
Attorney Docket No. E14.2P-10817-US02

Remarks

Claims 1-42 have been canceled without prejudice. Applicants reserve the right to prosecute these claims in a continuation application.

New claims 43-57 have been added. Support is found from the claims as originally filed, from page 4 and from the examples on pages 16-17. See specifically Table 2 on page 16 and figure 1. No new matter has been added.

New independent claims 43, 51, 53 and 56 are directed to methods of protecting polyalkylene terephthalate containers using alkaline compositions having specific protectants not disclosed by the prior art.

Applicants have directed these independent claims to preferred embodiments which exhibit surprisingly and unexpectedly improved results over a variety of other compositions when used on PET containers for both cleaning and protection, i.e. less hazing and stress cracking of the PET. See examples 3, 4, 5 and 7 on pages 16-17 and refer to Figure 1. The comparative examples, in general, exhibited poorer results in both cleaning and protection, when used on PET.

Rejections

35 U.S.C. §102(e)

Cords et al., US 6,554,005

Claims 16-21 and 35-39 have been rejected under 35 U.S.C. §102(e) a being anticipated by Cords et al., US 6,554,005.

Applicants have canceled claims 1-42.

Cords et al. is directed to a method for cleaning polyethylene terephthalate containers including contacting the PET container with an alkaline wash solution formulated from a first concentrate, a second concentrate, an alkalinity source, and a balance of water. The first concentrate preferably has a first nonionic surfactant, a first builder, and acid in an amount effective to provide a phase stable solution. The second concentrate preferably has a second nonionic surfactant and a second builder. See the Abstract. The nonionic surfactant may be selected from ethoxylated alkylphenols, ethoxylated aliphatic alcohols, ethoxylated amines,

Amendment Attorney Docket No. E14.2P-10817-US02

ethoxylated ether amines, carboxylic esters, carboxylic amides, and polyoxyalkylene oxide block copolymers. See column 3, lines 41-64.

New independent claim 43 is directed to a method for protecting polyalkylene terephthalate containers with a composition formed from a concentrate including about 1% to about 20% of at least one C₁₂ to C₂₀ alkyl diphenylene oxide disulfonates and mixtures thereof, about 1% to about 20% of at least one nonionic defoamer and about 1% to about 40% of at least one sequestrant selected from the group consisting of phosphonates, gluconates, phosphates and mixtures thereof.

New independent claim 51 is directed to a method for cleaning and protecting polyalkylene terephthalate containers, the method including the step of contacting the containers with a composition including at least one C₁₆ to C₂₀ alkyl diphenylene oxide disulfonate.

New independent claim 53 is directed to a method for protecting protecting polyalkylene terephthalate by contacting the polyalkylene terephthalate containers with an alkaline composition, the alkaline composition formed by diluting a concentrate, the concentrate including about 1% to about 20% of an anionic linear alkylpolyether sulfonate, an anionic linear alkylpolyether phosphate or mixture thereof.

New independent claim 56 is directed to a method for protecting polyalkylene terephthalate containers by contacting the containers with a composition including an alkamide.

Cords et al. fails to disclose the specific protectants recited in independent claims 43, 51, 53 and 56. As Applicants have discussed above, these compositions exhibit surprisingly excellent cleaning and protection of PET.

Claims 44-50 depend from claim 43, claim 52 depends from claim 51, claims 54-55 depend from claim 53 and claim 57 depends from claim 56. These dependent claims are patentable over Cords et al. for at least the reasons that independent claims 43, 51, 53 and 56 are patentable over Cords et al.

Ruhr et al., US 6,537,960

Claims 1, 5, 11 and 16 have been rejected under 35 U.S.C. §102(e) as being unpatentable over Ruhr et al., US 6,537,960. These claims have been canceled.

Independent claims 43, 51, 53 and 56 and the corresponding dependent claims

Amendment
Attorney Docket No. E14.2P-10817-US02

have been discussed above.

Ruhr et al. is directed to a low foaming surfactant blend for use in highly alkaline conditions including at least one C₃ to C₁₀ alkyl polyglucoside, at least one amine oxide, at least one polycarboxylated alcohol alkoxylate and at least one alcohol alkoxylate.

Ruhr et al. is silent as to cleaning and protecting of polyalkylene terephthalate containers and is silent as to the specific surfactants recited in new independent claims 43, 51, 53 and 56. Dependent claims 44-50, 52, 54-55 and 57 are patentable for at least the reasons that independent claims are patentable over Ruhr et al.

Man et al., US 6,838,422

Claims 1, 5, 11 and 16 have been rejected under 35 U.S.C. §102(e) as being anticipated by Man et al., US 6,838,422. Claims 1, 5, 11 and 16 have been canceled.

Applicants submit that Man et al. discloses a plastics compatible detergent including about 0.01 wt-% to about 10 wt-% anionic surfactant, about 0.01 wt-% to about 100 wt-% cationic surfactant, about 0.01 wt-% to about 10 wt-% of at least one of reverse polyoxyalkylene block copolymer surfactant, alcohol alkoxylate surfactant having polyoxypropylene and/or polyoxybutylene end groups, and mixtures thereof, about 0.01 wt-% to about 10 wt-0% alkylpolyglucoside surfactant and about 0.01 wt-% to about 20 wt-% silicone surfactant.

Applicants submit that Man et al. fail to disclose a method of cleaning and protecting polyalkylene terephthalate containers by contacting the containers with alkaline compositions having the specific surfactants recited in independent claims 43, 51, 53 and 56. Claims 44–50, 51, 53-54 and 56 depend from claims 43, 51, 53 and 56 respectively and are patentable over Man et al. for at least the reasons that claims 43, 51, 53 and 56 are patentable over Man et al.

Amendment
Attorney Docket No. E14.2P-10817-US02

35 U.S.C. §102(b)

Weibel, US 6,036,789

Claims 1, 5, 11 and 12 have been rejected under 35 U.S.C. §102(b) as being anticipated by Weibel, US 6,036,789.

Applicants have canceled claims 1-42 have been canceled.

The new claims 43-57 are directed to methods of protecting polyalkylene terephthalate containers by contacting the containers with an alkaline composition including specific protectants.

Weibel is directed to a cleaning composition comprising a hexyldiphenylether disulfonate (col. 4, comparative example). Weibel is silent as to polyalkylene terephthalate containers which are susceptible to hazing and stress cracking during cleaning, and is also silent as to any of the specific protectants recited in new independent claims 43, 51, 53 and 56. Claims 44-50 depend from claim 43, claim 52 depends from claim 51, claims 54-55 depend from claim 53 and claim 57 depends from claim 56. These dependent claims are patentable over Weibel for at least the reasons that claims 43, 51, 53 and 56 are patentable over Weibel respectively.

Peters et al., US 6,090,860

Claims 1, 16 and 24–26 have been rejected under 35 U.S.C. §102(b) as being anticipated by Peters et al., US 6,090,860. Applicants have canceled these claims.

Peters et al. disclose a method of separating a coating from a base plastic in a multilayered structure, comprising the steps of (A) providing the multilayered structure comprising at least a coating and a base plastic; (B) contacting the multilayered structure with a mixture comprising (i) a major amount of water, (ii) at least one basic compound or acid compound, (iii) at least one lifting agent, and (iv) at least one accelerator; and (C) separating the coating from the base plastic. Peters et al. disclose sodium hexyldiphenylether disulfonate and Triton H-55, an alkylaryl polyether phosphate ester (col. 13, example 3).

Applicants' independent claims 43, 51, 53 and 56 are now directed to methods of protecting polyalkylene terephthalate containers employing protectants not disclosed by Peters et al. Claims 44-50 depend from claim 43, claim 52 depends from claim 51, claims 54-55 depend

Amendment
Attorney Docket No. E14.2P-10817-US02

from claim 53 and claim 57 depends from claim 56 and are patentable for at least the reasons that claims 43, 51, 53 and 56 are patentable over Peters et al., US 6,090,860.

Ahmed, US 5,972,866

Claims 1, 5, 11 and 12 have been rejected under 35 U.S.C. §102(b) as being anticipated by Ahmed, US 5,972,866. These claims have been canceled.

Applicants submit that Ahmed discloses methods and compositions for cleaning food preparation surfaces. Ahmed is silent as to PET which has special considerations which must be taken into account when cleaning and recycling including the hazing and stress cracking which can occur if the correct composition is not employed.

Furthermore, Ahmed discloses sodium hexyldiphenylether disulfonate (col. 10, example 3), but is silent as to the specific protectants recited in independent claims 43, 51, 53 and 56. Claims 41-50, 52, 54-55 and 57 depend from claims 43, 51, 53 and 56 respectively, and are patentable over Ahmed for at least the reasons that claims 43, 51, 53 and 56 are patentable over Ahmed.

Nosler et al., US 3,625,904

Claims 1-6 and 11 have been rejected under 35 U.S.C. §102(b) as being anticipated by Nosler et al., US 3,625,904. These claims have been canceled.

Nosler et al. disclose antimicrobial washing and washing adjuvants comprising 1 percent to 30 percent by weight of a substituted phenyl ether antimicrobial component for use in cleaning textiles. Nosler et al. discloses coconut fatty acid diethanolamide.

Nosler et al. is silent as to a method for cleaning and protecting polyalkylene terephthalate containers including the step of contacting the containers with the compositions as recited in independent claims 43, 51, 53 and 56. These claims are patentable over Nosler et al. for at least this reason.

Claims 44-50, 52, 54-55 and 57 depend from claims 43, 51, 53 and 56 respectively and are patentable over Nosler et al. for at least the reasons that claims 43, 51, 53 and 56 are patentable over Nosler et al.

Amendment
Attorney Docket No. E14.2P-10817-US02

Connor et al., US 4,014,806

Claims 1, 2, 5, 6, 11, 12, 16 and 17 have been rejected under 35 U.S.C. §102(b) as being anticipated by Connor et al., US 4,014,806. These claims have been canceled.

Applicants submit that Connor et al. discloses organic polyphosphate mixtures useful as builders in liquid cleaning compositions comprising surface active agents or alkali metal hydroxides or silicates with which they are more compatible in aqueous solution than previously used polyphosphate builder materials (Abstract).

Applicants submit that Connor et al. is silent as to cleaning polyalkylene terephthalate to which applicants' method claims 43, 51, 53 and 56 are now directed. Claims 44-50, 52, 54-55 and 57 depend from claims 43, 51, 53 and 56 and are patentable over Connor et al. for at least the reasons that claims 43, 51, 53 and 56 are patentable over Connor et al.

Rouillard, EP 0 844,310

Claims 1, 3-7, 10-12, 16, 18-21, 24, 27-29, and 32-39 have been rejected under 35 U.S.C. §102(b) as being anticipated by Rouillard, EP 0 844, 310. These claims have been canceled.

Applicants submit that Rouillard discloses mold removal from plastic bottles such as polyester and polycarbonate bottles by adding to a caustic soaking solution, an effective amount of a complex polyphosphate such as sodium tripolyphosphate and a surfactant (Abstract).

Surfactants contemplated by Rouillard include nonionic surfactants which are the polyalkoxylated fatty alcohols and the polyethoxylated straight chain alcohols.

Suitable anionic surfactants contemplated by Rouillard include sodium C₁₄ to C₁₆ alpha olefin sulfonates, alkyl aryl sulfonates, carboxylated alcohols, alkali metal salts of phosphate esters, alkali metal alkanoates, fatty alcohol polyglycol ether carboxylic acids, dioctylsulfosuccinates, modified ethoxylates, and alkali metal xylene sulfonates.

Suitable amphoteric surfactants contemplated by Rouillard include alkyl and alkyl alkoxy iminodiproprionates.

Rouillard fails to disclose the specific surfactants recited in independent claims 43, 51, 53 and 56. Claims 44-50, 52, 54-55 and 57 depend from claims 43, 51, 53 and 56 respectively and are patentable over Rouillard for at least the reasons that claims 43, 51, 53 and

Amendment Attorney Docket No. E14.2P-10817-US02

56 are patentable over Rouillard.

Rossio, US 5,223,162

Claims 1, 11, 12, 16, 19, 21, 24, 26 and 34 have been rejected under 35 U.S.C. §102(b) as being anticipated by Rossio, US 5,223,162. Claims 1, 11, 12, 16, 19, 21, 24, 26 and 34 have been canceled.

Applicants submit that Rossio discloses inhibition of stress cracking in poly(alkylene terephthalate) or polycarbonate articles of manufacture by applying to the article, a hydrophilic-substituted aromatic hydrocarbon having either an alkyl or aryl side chain, such as, e.g., a sodium sulfonate. Preferably, the stress crack inhibitor is applied to the article in the form of a dilute aqueous caustic bottle washing solution. See Abstract.

The stress crack inhibitors contemplated by Rossio include hydrophilicsubstituted aromatic hydrocarbon having an alkyl or aryl side chain, in particular, the sodium salt of a sulfonated hydrocarbon having an alkyl or aryl side chain.

Representative of the type of stress crack inhibitor contemplated herein is, for example, sodium xylene sulfonate, sodium decyl diphenyl oxide sulfonate, sodium naphthalene sulfonate, sodium dimethyl naphthalene sulfonate, sodium salts of linear alkyl benzene sulfonates, ordinarily having from about C_8 about C_{20} in the alkyl portion and the like, as well as mixtures thereof. The preferred stress crack inhibitor is sodium naphthalene sulfonate.

As suggested in the Office Action, Rossio also contemplates the use of a phosphate ester alkyl aryl anionic surfactant.

Applicants submit that Rossio fails to contemplate or suggest for use in a method of cleaning and protecting polyalkylene terephthalate containers, any of the specific surfactants recited in Applicants' independent claims 43, 51, 53 and 56.

Furthermore, as illustrated by Applicants on pages 16-17 and from figure 1, sodium xylene sulfonate exhibited poor cleaning and poor protection of PET as compared to Applicants' inventive embodiments.

Claims 44-50, 52, 54-55 and 57 depend from claims 43, 51, 53 and 56 respectively and are patentable over Rossio for at least the reasons that claims 43, 51, 53 and 56 are patentable over Rossio.

Amendment
Attorney Docket No. E14.2P-10817-US02

CONCLUSION

Claims 43-57 are pending in the application. Applicants have addressed each of the issues presented in the Office Action. Based on the foregoing, Applicants respectfully request reconsideration and an early allowance of the claims as presented. Should any issues remain, the attorney of record may be reached at (952)563-3011 to expedite prosecution of this application.

Respectfully submitted,

VIDAS, ARRETT & STEINKRAUS

Registration No.: 43071

Date: December 22, 2005

6109 Blue Circle Drive, Suite 2000 Minnetonka, MN 55343-9185 Telephone: (952) 563-3000 Facsimile: (952) 563-3001

f:\wpwork\irl\10817us02_amd_20050902.doc